



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/525,247 03/15/00 URIU

E YAMAP0347USB

EXAMINER

MM92/1106

RENNER OTTO BOISSELLE & SKLAR PLL  
NEIL A DUCHEZ  
1621 EUCLID AVENUE  
19TH FLOOR  
CLEVELAND OH 44115

NGUYEN, T

ART UNIT

PAPER NUMBER

2832

DATE MAILED:

11/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/525,247

Applicant(s)

Uriu et al.

Examiner

Tuyen T. Nguyen

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Aug 24, 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 8-15 and 21-38 is/are pending in the application.
- 4a) Of the above, claim(s) 34-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-15 and 21-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20) ☐ Other:

Art Unit: 2832

## **DETAILED ACTION**

### ***Election/Restriction***

1. Newly submitted claims 34-38 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Applicant newly claims an electro-forming process not previously presented.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 34-38 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8-15 and 21-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tashiro et al. [US 5,515,022] in view of Hirohashi [JP 6-112047].

Tashiro et al. discloses a multi-layered chip inductor [1] comprising:

Art Unit: 2832

- at least one conductive patterns [31, 32] having a thickness of 10 micro-meter or more and a width to thickness ratios from 1 to less than 5 [see column 6, lines 15-25];
- at least one pair of insulating layers [22, 23] formed of magnetic material sandwiching the conductor patterns; and
- a thick conductor [35] connecting the conductive patterns [31, 32].

Tashiro et al. discloses the instant claimed invention except for inductor component being formed of a ceramic material.

Hirohashi discloses a ceramic chip inductor.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the inductor component of Tashiro et al. with a ceramic material, as suggested by Hirohashi, for the purpose of controlling the frequency response.

Tashiro et al. discloses that various printing methods can be used to applied the conductive patterns.

The particular printing method selected would have been an obvious design consideration based on the specific materials and thickness to width ratios applied/used.

The specific shapes of the conductive patterns would have been an obvious design consideration depended upon the specific application of the inductive components.

#### ***Response to Arguments***

4. Applicant's arguments filed 08/24/01 have been fully considered but they are not persuasive.

Art Unit: 2832

Applicant argues that:

[1] There is no motivation to make the combination of using the ceramic material of Hirohashi with Tashiro et al.

[2] The rejection did not address the limitation of “no specific gap.”

The examiner disagrees.

Regarding [1], applicant acknowledges [argument page 5] that Tashiro et al. desired to improve high frequency response. It is well known to use the ceramic material to improve frequency response and reduce cost. Hirohashi teaches the use of a ceramic material to form an inductor component. A skilled artisan would have been motivated to select a ceramic material for the layers of Tashiro et al., as suggested by Hirohashi.

Regarding [2], applicant has not specified what is intended by “no specific gap.” Tashiro et al. teaches a conductive pattern between at least one pair of insulation layer. Tashiro et al. has not specified or shown any specific gap between the layers. Tashiro et al., nor applicant, has precluded that a gap may be formed.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the

Art Unit: 2832

mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tuyen T. Nguyen whose telephone number is (703) 308-0821.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Gellner, can be reached at (703)308-1721. The fax number for this Group is (703)305-7724.

Any inquiry of a general nature or relating to the status of this application of proceeding should be directed to the Group receptionist whose telephone number is (703)308-0956.

TTN TTN

Art Unit 2832

November 4, 2001

  
LINCOLN DONOVAN  
PRIMARY EXAMINER  
GROUP 2100